

Supplemental Issue of
National Seminar on Empowering and Empanelling Ayurveda System of Medicine
Organized by SC Mutha Aryangla Vaidyak Mahavidyalaya, Satara on 26-27 March 2015

Removal of Tattoo with Electro thermal Cautery – A Case Study

Case study

Kanchan Borkar^{1*}, Anantkumar V Shekokar²

1. Reader, 2. Professor, Department of Shalya Tantra,
SVNHT's Ayurved Mahavidyalaya, Rahuri Factory, Maharashtra.

* Corresponding Author: **Kanchan Borkar**, Reader, Department of Shalya Tantra, SVNHT's
Ayurved Mahavidyalaya, Rahuri Factory, Maharashtra.

E-mail: drkanchanborkar@gmail.com; Phone No +91-9960299306

Abstract

People know tattoo since thousands of year's. It is a fashion acquired by youngster mostly in their day to day life. In earlier period of human life it was use as an identification mark but now a day it is made with different colors and adopted as a fashion or hobby. After some period people want to remove or replace old tattoo by another one. There are different methods for tattoos removal with advantage and disadvantage like local application of caustic, excision followed by skin graft, laser therapy and electro thermal cautery. In present case study, tattoo was removed with electro thermal cauterization. Patient was observed weekly up to normal epithelialization and it was observed that tattoo removed completely with scar formation.

Key word Tattoo, Electro thermal cautery, Laser, Scar, Jatyadi Ghrut.

Introduction

The history of tattoos began over 5000 years ago and is as different as the people who wear them(1). Tattoos are created by inserting color material beneath the skin surface. There are so many reasons for making tattoos like holy purpose, as a fashion, identification mark or as a culture etc. As time passes, mentality of human being constantly changes and that's why many people want to remove it. There are different method of tattoo removal such as local application of caustic, electro thermal cauterization, branding and laser therapy but application of caustic is not effective and hence not reliable. Branding is destructive and horrible because it is done with burning coal, candles, fire, cowdung etc, hence not acceptable medico ethically.

Laser is effective but not economical for common people in rural area(2) while electro thermal cauterization is easily available, economical, reliable and bearable hence acceptable in developing and rural area.

Case report: A case of 45 yrs male patient working as canteen manager visited to our OPD of Shalyatantra dept of Ayurved mahavidyalaya, Rahuri on 28/11/14 with desire to remove tattoo for his personal reason. After taking history we came to know that he had visited to Astrologist before 2 months for his business growth. After his discussion with Astrologist the patient decided to remove the tattoo present over his forearm for development and progress of his business. After surgical profile of the patient he had been posted

for the minimum invasive procedure that is electro thermal cauterization.

The cleaning of tattoo was achieved with Triphala kashaya. It was then wiped with dry sterilized gauze followed by use of local anesthetic lignocaine 10% spray for temporary loss of sensation. Suitable designed probe was attached to electro thermal cautery and red hot tip of probe was achieved and simultaneously applied on tattoo mark upto the Tvak Sthita Samyak Dagdha Lakashana(3). In the present case study selective removal of each tattoo pigment was achieved with electro thermal cauterization. The cauterized site was then applied with local application of Jatyadi Ghruta and some advised twice in a day upto normal epithelialization. The site was inspected on 3rd day and after that weekly. The burnt tissue gets removed and new healthy granulation tissues occurs simultaneously.

Discussion

The most common adverse effect following electro thermal cautery is maximum scarring, to minimize this adverse effect researchers should come for longer duration of study with large group of patient to achieve minimum scarring with use of formulation mentioned in Sushruta's Vaikrutapaham Upakaram(4).

Conclusion

1. The tattoo removal with electro thermal cautery is OPD procedure.
2. Present case study shows that electro thermal cauterization is

helpful and result oriented procedure in tattoo removal.

3. Thus from above case study it can be concluded that tattoo removal with electro thermal cauterization proves to be an easy, safe, uncomplicated and economical procedure.

References

1. Newstead J. Assessment of laser/skin interactions by histologic and cytogenetic techniques. Ph.D. Thesis, University of Strathclyde, Glasgow. 1988.
2. Taylor C.R. et al., Treatment of tattoos by Q-switched ruby laser. A dose-response study. *Arch Dermatol.* 1990 Jul;126(7): pp. 893–9.
3. Vd. Yadavji Trikamji Acharya; *Sushrut Samhita of Sushruta with commentary of Dalhanacharya, chaukhamba surbharati prakashana, Varanasi, 2003, Sutrasthana, Agnikarmavidhiadhayaya no.12.Sutra no.08 pg.no. 52.*
4. Vd. Yadavji Trikamji Acharya; *Sushrut Samhita of Sushruta with commentary of Dalhanacharya, chaukhamba surbharati prakashana, Varanasi, 2003, Sutrasthana, Aamapakvaneshiyaadhayaya no.17.Sutra no.18 pg.no. 84.*

Photographs of Tattoo Removal



Photo No. 1 Before Treatment Tattoo Mark

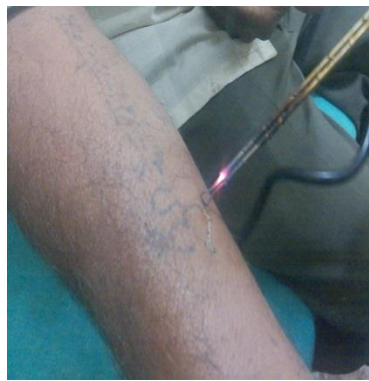


Photo No. 2 Electrothermal Cauterization in Tattoo removal



Photo No. 3. 3rd Day After procedure



Photo No.4. 7th Day After procedure



Photo No. 5 - 15th Days After procedure



Photo No.6 - 21st Days After procedure



Photo No. 7. 28th Days After procedure



Photo No.8. 35th Days After procedure
